

Amendments to the Claims:

This listing of claims will replace all prior version, and listings, of claims in the application:

Listing of Claims:

1. (original) A method comprising a policy administrator:
 - establishing a network monitoring digital contract with a network monitoring element;
 - establishing a network use digital contract with a first and a second network element; and
 - transmitting decrypting information to the network monitoring element for decrypting encrypted communications between the first network element and the second network element per terms in the network monitoring digital contract and the network use digital contract.

2. (original) The method of claim 1, wherein transmitting decrypting information to the network monitoring element for decrypting encrypted communications between the first network element and the second network element per terms in the network monitoring digital contract and the network use digital contract comprises the policy administrator:

- receiving a request from the network monitoring element for the decrypting information;

- transmitting a request to the network monitoring element for the network monitoring digital contract;

- receiving the network monitoring digital contract from the network monitoring element;

- authenticating the received network monitoring digital contract; and

- transmitting decrypting keys to decrypt the encrypted communications between the first network element and the second network element to the network monitoring element.

3. (original) The method of claim 1, wherein transmitting decrypting information to the network monitoring element for decrypting encrypted communications between the first network element and the second network element per terms in the network monitoring digital contract and the network use digital contract comprises the policy administrator decrypting the encrypted communications between the network elements and transmitting the decrypted communications to the network monitoring element.

4. (original) The method of claim 1, wherein establishing a network monitoring digital contract with a network monitoring element comprises:

- receiving a network monitoring element's digital certificate;
- authenticating the network monitoring element's digital certificate;
- receiving a network monitoring element's digital signature;
- authenticating the network monitoring element's digital signature;
- writing contract terms in an electronic document;
- writing the network monitoring element's digital certificate and the network monitoring element's digital signature in the electronic document;
- writing a digital certificate of the policy administrator and a digital signature of the policy administrator in the electronic document; and
- transmitting a copy of the electronic document to the network monitoring element.

5. (original) The method of claim 4, wherein writing contract terms in an electronic document comprises:

- writing an effective date and time of the network monitoring digital contract;
- writing a time period during which the network monitoring digital contract is valid; and
- specifying the decrypting information, including decrypting keys the network monitoring element is to receive.

6. (original) The method of claim 1, wherein establishing a network use digital contract with each network element comprises:

- receiving a network element's digital certificate;
- authenticating the network element's digital certificate;
- receiving a network element's digital signature;
- authenticating the network element's digital signature;
- writing contract terms in an electronic document;
- writing the network element's digital certificate and the network element's digital signature in the electronic document;
- writing a digital certificate of the policy administrator and a digital signature of the policy administrator in the electronic document; and
- transmitting a copy of the electronic document to the network element.

7. (original) The method of claim 6, wherein writing contract terms in an electronic document comprises:

- writing an effective date and time of the network use digital contract; and
- specifying the decrypting information, including decrypting keys the policy administrator obtains from the network element.

8. (original) The method of claim 1 further comprising:

- establishing a network policy; and
- transmitting the network policy to network elements.

9. (original) A method, comprising a network monitoring element:

- establishing a network monitoring digital contract with a policy administrator;
- transmitting a request to monitor encrypted communications between network elements;

- transmitting the network monitoring digital contract; and
- receiving decrypting information, including decrypting keys from the policy administrator for decrypting encrypted communications between a first network element and a second network element per the terms in the network monitoring digital contract.

10. (original) The method of claim 9, wherein receiving decrypting information from the policy administrator for decrypting encrypted communications between a first network element and a second network element per the terms in the network monitoring digital contract comprises receiving from the policy administrator decrypted communications after the policy administrator decrypts the encrypted communications between the network elements.

11. (original) The method of claim 9, wherein establishing a network monitoring digital contract with a policy administrator comprises a network monitoring element:

- transmitting its digital certificate to the policy administrator;
- transmitting its digital signature to the policy administrator; and
- receiving a copy of the network monitoring digital contract from the policy administrator.

12. (currently amended) A method, comprising:

establishing by a first network element, a network use digital contract with a policy administrator;

communicating with a second network element per the terms of the network use digital contract;

logging in a secure manner by the first network element, encryption and authenticating ~~algorithms, and decryption~~ algorithms and decrypting keys used in the communication; and

permitting the policy administrator access to the log to obtain the decrypting keys, in accordance with the network use digital contract.

13. (original) The method of claim 12, wherein establishing by a first network element, a network use digital contract with a policy administrator comprises a network element:

transmitting its digital certificate;

transmitting its digital signature; and

receiving a copy of the network use digital contract from the policy administrator.

14. (currently amended) An article of manufacture comprising:

a machine-readable medium that provides instructions, that when executed by a machine, cause said machine to perform operations comprising:

establishing a network monitoring digital contract ~~with~~ between a policy administrator and a network monitoring element;

establishing a network use digital contract ~~with~~ between a policy administrator and a first and a second network element; and

transmitting decrypting information from the policy administrator to the network monitoring element for decrypting encrypted communications between the first network element and the second network element per terms in the network monitoring digital contract and the network use digital contract.

15. (original) The machine-readable medium of claim 14, wherein said instructions for transmitting decrypting information to the network monitoring element for decrypting encrypted communications between the first network element and the second network element per terms in the network monitoring digital contract and the network use digital contract, include further instructions to direct the policy administrator to receive a request from the network monitoring element for the decrypting information; to receive the network monitoring digital contract from the network monitoring element; to authenticate the network monitoring digital contract; and to transmit decrypting information, including decrypting keys needed to decrypt the encrypted communications between the network elements.

16. (currently amended) The machine-readable medium of claim 14, wherein said instructions for transmitting decrypting information from the policy administrator to the network monitoring element ~~for decrypting encrypted communications between the first network element and the second network element per terms in the network monitoring digital contract and the network use digital contract~~ include further instructions to decrypt, at the policy administrator, the encrypted communications between the network elements; and to transmit the decrypted communications from the policy administrator to the network monitoring element.

17. (original) The machine-readable medium of claim 14, wherein said instructions establishing a network monitoring digital contract between a policy administrator and a network monitoring element include further instructions to receive a network monitoring element's digital certificate and digital signature; to authenticate the network monitoring element's digital certificate and digital signature; to write the contract terms, including an effective date and time of the network monitoring digital contract; to specify a time period during which the network monitoring digital contract is valid; to specify the decrypting information, including decrypting keys the network monitoring element is to obtain in an electronic document; to write the network monitoring element's digital certificate and digital signature in the electronic document; to write a digital certificate and a digital signature of the policy administrator in the electronic document; and to transmit a copy of the electronic document to the network monitoring element.

18. (original) The machine-readable medium of claim 14, wherein said instructions establishing a network use digital contract between the policy administrator and network elements include further instructions to receive a network element's digital certificate and digital signature; to authenticate the network elements digital certificate and digital signature; to write contract terms, including an effective date and time of the network use digital contract; to specify the decrypting information, including decrypting keys the policy administrator is to obtain in an electronic document; to write the network element's digital certificate and digital signature in the electronic document; to write a digital certificate and a digital signature of the policy administrator in the electronic document; and to transmit a copy of the electronic document to the network element.

19. (original) The machine-readable medium of claim 14, wherein said instructions include further instructions to establish a network policy; and to transmit the network policy to network elements.

20. (currently amended) An article of manufacture comprising:

a machine-readable medium that provides instructions, that when executed by a machine, cause said machine to perform operations comprising:

establishing a network monitoring digital contract with a policy administrator;
transmitting, to the policy administrator, a request to monitor encrypted communications between network elements;

transmitting the network monitoring digital contract to the policy administrator;
and

after transmitting the network monitoring digital contract to the policy administrator, receiving decrypting information, including decrypting keys from the policy administrator; ~~and administrator for decrypting~~

using the decrypting information at a network monitoring element to decrypt encrypted communications between a first network element and a second network element per the terms in the network monitoring digital contract.

21. (original) The machine-readable medium of claim 20, wherein said instructions for receiving decrypting information from the policy administrator for decrypting encrypted communications between a first network element and a second network element per the terms in the network monitoring digital contract include further instructions to receive from the policy administrator decrypted communications after the policy administrator decrypts the encrypted communications between the network elements.

22. (original) The machine-readable medium of claim 20, wherein said instructions for establishing a network monitoring digital contract with a policy administrator include further instructions for a network monitoring element to transmit its digital certificate to the policy administrator; to transmit its digital signature to the policy administrator; and to receive a copy of the network monitoring digital contract from the policy administrator.

23. (currently amended) An article of manufacture comprising:

a machine-readable medium that provides instructions, that when executed by a machine, cause said machine to perform operations comprising:

establishing by a first network element, a network use digital contract with a policy administrator;

communicating with a second network element per the terms of the network use digital contract;

logging in a secure manner by the first network element, encryption and authenticating algorithms, and ~~decryption~~ decrypting keys used in the communication; and

permitting the policy administrator access to the log to obtain the decrypting keys.

24. (original) The machine-readable medium of claim 23, wherein said instructions for establishing by a first network element, a network use digital contract with a policy administrator include further instructions for a network element to transmit its digital certificate; to transmit its digital signature; and to receive a copy of the network use digital contract from the policy administrator.

25-29. (canceled)

30. (new) An apparatus comprising:

- a processor;
- a machine accessible medium in communication with the processor; and
- instructions encoded in the machine accessible medium, wherein the instructions, when executed by the processor, enable the apparatus to operate as a policy administrator that performs operations comprising:

- establishing a network monitoring digital contract with a network monitoring element in communication with the apparatus;

- establishing network use digital contracts with first and a second network element in communication with the apparatus; and

- transmitting decrypting information to the network monitoring element for decrypting encrypted communications between the first network element and the second network element, in accordance with terms in the network monitoring digital contract and the network use digital contracts.

31. (new) An apparatus according to claim 30, wherein the operation of transmitting decrypting information to the network monitoring element comprises:

- transmitting a decrypting key to the network monitoring element, wherein the decrypting key allows the network monitoring element to decrypt the encrypted communications between the first and second network elements.

32. (new) An apparatus according to claim 30, wherein the operation of transmitting decrypting information to the network monitoring element comprises:

- decrypting the encrypted communications between the first and second network elements; and

- transmitting the decrypted communications to the network monitoring element.

33. (new) An apparatus comprising:

- a processor;

- a machine accessible medium in communication with the processor; and

- instructions encoded in the machine accessible medium, wherein the instructions, when executed by the processor, enable the apparatus to operate as a network monitoring element that performs operations comprising:

 - establishing a network monitoring digital contract with a policy administrator;

 - transmitting, to the policy administrator, a request to monitor encrypted communications between first and second network elements;

 - transmitting the network monitoring digital contract to the policy administrator;

- and

- receiving decrypting information, including a decrypting key, from the policy administrator, wherein the decrypting information allows the apparatus to decrypt encrypted communications between the first and second network elements, in accordance with terms in the network monitoring digital contract.

34. (original) The apparatus of claim 33, wherein the operation of establishing a network monitoring digital contract with the policy administrator comprises:

- receiving the network monitoring digital contract from the policy administrator.